

This page is mainly introduced the SA-213 TP317LM Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SA-213 TP317LM, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel SA-213 TP317LM

SA-213 TP317LM Standard Number:

ITEM	Standard Number	Descriptions
1	SA-213/SA-213M	Specification for Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes

SA-213 TP317LM Chemical composition (mass fraction) (wt.%)

Chemical	Min.(%)					Max.(%)				
C						0.30				
Si						0.70				
Mn						2.00				
P						0.045				
S						0.03				
Ni	13.00					27.00				
Cr	18.00					20.00				
Al										
Cu						0.75				
Ti										
Fe										
N						0.10				
Mo	4.00					5.00				
V						0.08				
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta	
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other	

Specification for Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-

Exchanger Tubes

SA-213 TP317LM Physical Properties

Tensile strength	115-234	σ_b /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	123-321	-
HRC	30	-

SA-213 TP317LM Mechanical Properties

Tensile strength	231-231	σ_b /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	235-268	-
HRC	30	-

SA-213 TP317LM Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

SA-213 TP317LM Range of products				
Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

We can produce Specialsteel the specifications follows: